# GARMENT HANGER HAVING LOCKING DEVICE BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

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The present invention relates to a garment hanger, and more particularly to a garment hanger having a locking device to lock the garment hanger to the supporting member, and to prevent the garment hanger from being disengaged from the supporting member.

## 2. Description of the Prior Art

As shown in FIGS. 1 and 2, the typical garment hangers 10 have been developed for hanging garments 13, and comprise a frame 11 for supporting the garments 13, and a hook 12 attached to or extended from the frame 11, for hooking or attaching to the supporting member 14, such as the hanging rod 14.

However, the hooks 12 normally include an open structure that may not be solidly attached or secured to the supporting member 14 or the hanging rod 14, such that the typical garment hangers 10 and the garments 13 may have a good chance to be disengaged from the supporting member 14 or the hanging rod 14 in the windy days, best shown in FIG. 1.

In addition, the frames 11 and/or the hooks 12 of the typical garment hangers 10 are normally bent or wound or formed from a continuous and longitudinal wire or cable or the like, and do not include any reinforcing structure or member, such that the frames 11 and/or the hooks 12 of the typical garment hangers 10 include a weak structure and may have a good chance to be deformed or distorted while supporting heavy coats or garments, or the like, best

#### shown in FIG. 2.

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The present invention has arisen to mitigate and/or obviate the afore-described disadvantages of the conventional garment hangers.

### **SUMMARY OF THE INVENTION**

The primary objective of the present invention is to provide a garment hanger including a locking device to lock the garment hanger to the supporting member, and to prevent the garment hanger from being disengaged from the supporting member.

The other objective of the present invention is to provide a garment hanger including a frame having a reinforcing structure to greatly increasing the bending strength of the garment hanger, and to prevent the garment hanger from being deformed or distorted while supporting heavy coats or garments, or the like.

In accordance with one aspect of the invention, there is provided a garment hanger comprising a frame including two lateral side portions for engaging with shoulder portions of garments, and including an upper and intermediate neck portion having a narrower space formed therein, and the lateral side portions and the neck portion of the frame being defined by a peripheral beam, and means for attaching the frame to supporting members. The peripheral beam of the frame includes a non-circular cross section, to reinforce the frame, and to increase a bending strength of the frame.

The peripheral beam of the frame includes a T-shaped cross section having at least one horizontal bar and at least one vertical bar. The peripheral beam includes two segments to define the narrower space of the neck portion of the frame, and at least one rod coupled between the two segments of the peripheral beam, to further

reinforce the frame. The frame includes at least one hook attached to the lateral side portions thereof for hanging objects thereon.

The attaching means includes a snap ring provided on the peripheral beam of the frame, and having a space formed therein to receive the supporting members. The snap ring includes a catch provided on one end, and a hook on the other end for engaging with the catch, and for locking the frame to the supporting members, the hook is depressable and disengageable from the catch, for forming a passage between the hook and the catch, to allow the supporting members to be engaged into the space of the snap ring via the passage of the snap ring.

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Further objectives and advantages of the present invention will become apparent from a careful reading of the detailed description provided hereinbelow, with appropriate reference to the accompanying drawings.

## BRIEF DESCRIPTION OF THE DRAWINGS

- FIGS. 1 and 2 are perspective views illustrating the operation of the typical garment hangers;
- FIG. 3 is a plan view of a garment hanger in accordance with the present invention;
  - FIG. 4 is a partial cross sectional view of the garment hanger;
  - FIG. 5 is a plan view similar to FIG. 3, illustrating the operation of the garment hanger;
- FIG. 6 is a plan view similar to FIGS. 3, 5, illustrating the other embodiment of the garment hanger; and
  - FIGS. 7, 8 are perspective views illustrating the operation of the garment hanger.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, and initially to FIGS. 3 and 4, a garment hanger in accordance with the present invention comprises a frame 20 formed or defined by a peripheral beam 21 for supporting coats or garments 13 or the like thereon (FIGS. 7, 8). The peripheral beam 21 includes a non-circular cross section, such as an inverted T-shaped cross section having one or more lateral or horizontal bars 22, and/or one or more vertical bars 23, best shown in FIG. 4.

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The inverted T-shaped peripheral beam 21 of the frame 20 thus includes a greatly increased bending strength, as compared with that of the typical frames 11 of the typical garment hangers 10 (FIGS. 1, 2) which are bent or formed from the longitudinal wire normally having a circular cross section, such that the peripheral beam 21 of the frame 20 may be greatly reinforced by the lateral or horizontal bars 22 and/or the vertical bars 23 thereof.

The frame 20 includes two lateral side portions 24 for engaging with the shoulder portions of the coats or garments 13, or the like (FIGS. 7, 8), and includes an upper and intermediate neck portion 25 having a narrower space 26 formed between two segments 27 of the peripheral beam 21 that are substantially parallel to each other, and includes one or more rods 29 formed or coupled or secured between the two segments 27 of the peripheral beam 21, for further reinforcing the peripheral beam 21 of the frame 20, and thus for further greatly increasing the bending strength of the frame 20.

The frame 20 may further include one or more hooks 28 attached to the lateral side portions 24 for hanging or supporting the

other objects or clothes thereon. It is to be noted that the frame may include one rod (FIG. 6) or more rods 29 (FIGS. 3, 5) for reinforcing or for increasing the bending strength of the frame 20.

The garment hanger further includes a snap ring 30 formed or coupled or secured onto the peripheral beam 21 of the frame 20, and having a space 31 formed therein to receive the supporting members 14, such as the hanging rods 14, best shown in FIGS. 7. 8, and thus for solidly locking the frame 20 of the garment hanger to the supporting members 14.

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The snap ring 30 includes a catch 32 formed or provided on one end thereof, and a hook 33 formed or provided on the other end thereof, for engaging with the catch 32 (FIGS. 3, 6), and thus for solidly locking the frame 20 of the garment hanger to the supporting members 14, and for prevent the frame 20 from being disengaged from the supporting members 14.

As shown in FIG. 5, the hook 33 may be depressed and disengaged from the catch 32, for forming a passage 34 between the hook 33 and the catch 32, and thus for allowing the supporting members 14 to be engaged into the space 31 of the snap ring 30 via the passage 34 of the snap ring 30.

In operation, as shown in FIGS. 7. 8, the frame 20 of the garment hanger may be solidly hooked and locked to the supporting members 14 with the snap ring 30, and may be prevented from being disengaged from the supporting members 14, even in the windy days. In addition, the frame 20 includes a greatly reinforced peripheral beam 21 for preventing the frame 20 of the garment hanger from being deformed or distorted while supporting heavy

coats or garments, or the like.

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Accordingly, the garment hanger in accordance with the present invention includes a locking device to lock the garment hanger to the supporting member, and to prevent the garment hanger from being disengaged from the supporting member, and includes a frame having a reinforcing structure to greatly increasing the bending strength of the garment hanger, and to prevent the garment hanger from being deformed or distorted while supporting heavy coats or garments, or the like.

Although this invention has been described with a certain degree of particularity, it is to be understood that the present disclosure has been made by way of example only and that numerous changes in the detailed construction and the combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as hereinafter claimed.